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# FORESTRY AND AGRICULTURE

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The Forest, aided by man, will produce tenfold as much as will Nature unaided. View of a carefully regulated commercial forest such as France is now depending upon.

**W**HEN the pioneer missionaries, in the spring of 1841, planted from their all too scanty stock of seed the first little garden ever sown in Montana, there was great discontent and outcry among the Flatheads. Missionaries and Indians were both living scantily on roots and bark, supplemented by

buffalo meat, fish, and such small stores of potatoes and grains as could be spared from the white man's provisions. The savages thought the seed was put in the ground to prevent them from eating it. They did not understand the necessity for saving a little then, in order to have plenty for the future.

As the Flatheads of 1841 viewed any attempts at agriculture, so do some people to-day view any attempts at forestry. The story of the progress of agriculture among the Indians finds its counterpart in the story of the progress of forestry among civilized nations. The Indians thought the seed was put in the ground to prevent them from using it, and many people imagine that the National Forests were created to prevent them from using the timber and other resources within them. Even the smallest child now understands that the seed for the missionaries' garden was withheld in order that





Nature Unaided. Wild Meadows—North Fork Sacramento River, Siskiyou County, Calif.

the supply might be multiplied. And so it is with the resources of the National Forests. The forester, when he restricts the cutting of seed trees, and when he protects the small seedlings from damage, does so, not for the purpose of reducing the amount of timber to be used, but so that the supply may be multiplied.

Nature, unaided, raised sufficient grasses and grains, meats, nuts, and fruits, so that the Indians of California, the Pitts, Shastas, the Round Valley, the Klamath, and other tribes, might wander at will, taking their living wherever it might be found and with but little thought for the lean years. The white man early recognized, however, that nature, alone, makes a poor agriculturist, and that, in order to insure an abundance for an increasing population, she must be aided by agriculture. What agriculture is to ordinary farm crops, silviculture (the raising of trees) is to wood production, for nature as a silviculturist is little more of a success than nature as an agriculturist. Since time immemorial nature has been busily engaged in planting and growing trees in Northern California, yet she has succeeded in raising, in the pine belt, an average of only about 8,000 feet per acre. Probably the best timber in Siskiyou County is to be found in the sugar-pine stands belonging to the McCloud River Lumber Company, which run as high as fifty thousand feet per acre. Yet other nations have actually demonstrated that as much as 80,000 to 100,000 feet to the acre can be grown.





Nature, Aided by Agriculture. A new alfalfa field, Lower Hat Creek, Lassen County, Calif.

In spite, then, of the vaunted prodigality of nature, field and forest alike will produce manyfold as much when directed by man as when left to their own devices. That portion of our 18 million acres of California's National Forests which is capable of timber growth may be made to produce as much wood as an unregulated, unprotected area of much greater extent. For, while it has taken 200 years to grow some of our present saw logs, a forest having a fair representation of the different aged young trees within it may, by proper care and protection, be made to yield a crop of timber every thirty or forty years, often exceeding in volume the crop resulting from 200 years of unaided and unprotected growth.

Use is a virtue, and waste a sin. The National Forests of California, therefore, are so managed that their resources may be used. In spite of the old saying that "You can not have your loaf and eat it too," it is entirely practicable to eat your loaf and at the same time raise more grain as grist for the grinding. That is why the forester protects the young trees from fire, why he insists that only the old and the mature trees be cut to-day, why seed trees are left; why, while providing for the utilization of the annual forage crop, he yet insists that the life of that crop shall not be destroyed by overgrazing or killed by trampling.

It has been said that the civilization of any people may be accurately gauged by that self-control which enables them to save sufficient from a present supply in order that they may profit by a harvest. Such action depends largely upon an ability to visualize and capitalize the future. It is only by the exercise of such vision,



Nature, as a Silviculturist, is little more of a success than Nature as an Agriculturist.  
Scattered timber in Siskiyou County, Calif.

such forethought, and such self-control that our Nation, and California as an integral part of that Nation, may retain her rightful place in the sun. And since, in spite of all substitutes, wood is held to be as indispensable to man's prosperity and progress as water, light, or air, forestry now takes its place beside agriculture in the very life of our Nation.

